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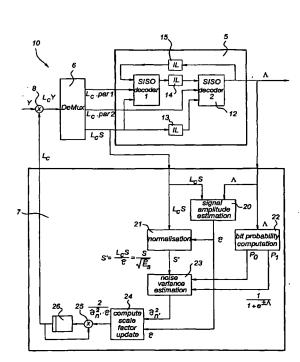
**English** 

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# (54) Title: TURBO DECODING WITH ITERATIVE ESTIMATION OF CHANNEL PARAMETERS



(57) Abstract: Method and decoding device for decoding a convolutionally coded input data signal y. The input data signal is multiplied with a scaling factor  $L_c(8)$  and then demultiplexed (6). The demultiplexed input data signal  $L_cS$  is then turbo decoded (5) in order to obtain decoder output likelihood ratio data  $\Lambda$ . The scaling factor  $L_c$  is updated (7) for a next iteration in dependence on a combination of a posteriori likelihood data based on turbo decoded output data  $\Lambda$  and a priori likelihood data based on the demultiplexed signal  $L_cS$ .

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